

BRIDGE TEAM WORKING GROUP EXECUTIVE SUMMARY

TIP Selection and Cost Estimate

TIP Selection Actions:

After a working group meeting in July 2007, current STIP selections were reviewed with Division personnel by Al Avant and Dan Holderman. Divisions were given the opportunity to recommend specific project advancements and delays based on changing bridge conditions in the field. Adjustments and revisions were allowed for FY 2010 through FY 2013 projects. Candidate lists for new projects for FY 2014 and FY 2015 were also generated by the Divisions. These lists were summarized in a spreadsheet generated by Al Avant and Cary Clemmons. This summary list, sorted by deficiency points, was used in the selection of projects for addition to the STIP for FY 2014 and 2015.

Members of the STIP Bridge Selection Committee agreed that the new spreadsheets were very useful and suggested using the concept in the future to summarize and document the selection process as new groups of projects are added for future STIPs.

Cost Estimate Actions:

After the working group's July 2007 meeting, a review of recent bridge project construction costs was undertaken by Doug Lane. This review was intended to establish a reasonable cost estimate for replacement bridges based on the size of the existing bridge. The bridges were subdivided into three tiers [Interstate, US and NC, and Secondary Routes] to evaluate the various conditions for projects. Mr. Lane's analysis yielded a construction cost value of \$704/sq ft for Interstate bridges, \$664/sq ft for US and NC Route bridges, and \$529/sq ft for Secondary Route bridges.

These factors were applied to currently programmed FY 2013 STIP projects and to the candidate bridges recommended by the Divisions to the STIP Bridge Selection Committee for inclusion in the 2009-2015 STIP. The committee used the cost estimates generated using these figures as a starting point for setting the initial construction cost for projects added to the STIP. A number of adjustments or modifications were made to these initial estimates to reflect project site conditions or existing bridge conditions. One such adjustment used an artificial bridge width to calculate the existing bridge area for existing one lane bridges, otherwise the initial cost estimates would have been significantly low. Another adjustment, made at the working group's discretion, involved using the next higher tier's square foot cost on projects with known site or construction issues that would likely lead to higher final project costs [i.e. a bridge on an NC route in a highly urbanized area might use the Interstate Route cost number to represent expected project complications and cost effects.]

These cost factors will be tracked going forward, and adjustments made before each STIP update cycle begins to ensure that recent trends are represented in initial STIP construction cost estimates.

Submitted 10/1/2008